

Board of directors and the quotient ratio

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Keywords

Beta, Corporate Governance, data analysis, Market Capitalization, Resources, and The Quotient Ratio.

Abstract

The aim of this research is to know and understand the effect of board of directors on the quotient ratio. The data was analyzed using descriptive statistics and correlation analysis. The finding shows that decrease in company leverage will lead to a decrease in the quotient ratio. An increase in the quotient ratio brings about an increase in company leverage. At 1% significance level, the company's leverage correlates with the quotient ratio. However, directors should be allowed to hold shares because it will help promote their sincerity and honesty in managing the affairs of the company. Though corporate governance can mean different things to different companies, irrespective of these differences, there is one common central theme binding these differences, that central theme is "The Proper Management of the Company".

Introduction

Benefits of corporate governance cannot be overemphasized. Such benefit is seen in the protection of the overall interests of corporate stakeholders, in such a way as to increase the level of trust and confidence investors and financiers have on the company (Wickramasinghe, 2006). Board of directors can affect the strategy of their firms in two general ways. Boards influence strategy indirectly through "decision control" activities such as evaluating past decisions made by top management, performing high-level reviews of strategic plans, and monitoring executive and firm performance. Board members can also influence strategy through "decision management" activities such as ratifying strategic proposals, asking probing questions about important issues, and helping to formulate, assess, and decide upon strategic alternatives. The most fundamental responsibility of boards is decision control, but decision management is not traditionally considered a necessary board role (Fama & Jensen, 1983; Judge & Zeithaml, 1992; Chitayat, 1984). Globally Corporate governance is practiced both in developed and developing countries (Nwokwu, 2018). Hence, the aim of this research is to know and understand the effect of board of directors on the quotient ratio, which is a performance measure utilized in this research, and which is a proxy for dependent variable..

Literature Review

Board of directors contributions into sensitive stages become useful when competitive pressures mount. Hence, BOD are advised to disclose their expertise to benefit others (Pearce & Zahra, 1991). Good corporate governance importance is that it safeguards against mismanagement, it helps to mitigate risk, it helps companies to operate more efficiently, etc. Registered companies are expected to practice good corporate governance (Ahunwan, 2002; International Finance Corporation, 2016; Okike, 2007; Vafeas, 1999). The study of corporate governance has been closely linked with the abuse of shareholders' interests (Ahunwan, 2002; Senaratne & Gunaratne, 2008). Shareholder activism has become a force for good in the extant corporate governance literature (Adegbite et al., 2012; Fama & Jensen, 1983). This is where the need for a board of directors arises to protect the interest of shareholders. The two factors that help to determine the effectiveness of directors as a corporate governance mechanism are how the board of directors roles are structured and how the board of directors roles are defined (Cadbury Report, 1992; Coles et al., 2001; Carver, 2010). The board is expected to ensure managers' goal congruent behaviour, and report to the shareholders on its stewardship (from stewardship theory perspective). Dutch boards on average are two-thirds the size of U.S. boards (Ees et al., 2003). On the other hand, Dharmadasa et al. (2014) argued that small board size has an influence on firm performance. Hence, the board should be composed in such a way as to ensure diversity of expertise without compromising independence, availability, integrity, and compatibility

(Ruigrok & Keller, 2006). However, firms with board members having the required skills and experiences will encourage learning, teamwork and effective performance (Nwokwu et al., 2018).

A company where there is CEO duality, the firm should ensure that there should be a strong independent element that will be the vice chairman that will help monitor the activities of the CEO in order to ensure that the CEO duality has a positive impact on the firm (Iyengar & Zampelli, 2009). The following independent variables were used in this research: H1 - Board Members Relative (BMR) is linked with The Quotient Ratio. H2 - Directors' Shareholdings (DSH) is linked with The Quotient Ratio. H3 - Board Measurement (BDM) is linked with The Quotient Ratio. H4 - The Independent Board Committee (IBC) is linked with The Quotient Ratio. H5 - Frequency of Board Meeting (FBM) is linked with The Quotient Ratio. Other important variables adopted are: Firm Age (FMA), Board Skills (BSK), and Company Leverage (CLG).

Research Methodology

Data Sampling, Validity and Reliability

The data is from a West African Country called Nigeria. Data was collected through secondary means. In addition, the accuracy and consistency of the data was checked. About 69 listed companies were selected. One study year was covered in this research. The inclusion rule of data availability was adopted. Least squares was the method adopted. The dependent variable adopted in this research is The Quotient Ratio (TQR) - It is measured as the market cap. and the financing cost divided by the value of all company-owned property and resources recorded on the balance sheet. Is a proxy for company performance.

The Multiple Regression Models

$$TQR_i = \beta_0 + \beta_1 BMR_i + \beta_2 DSH_i + \beta_3 BDM_i + \beta_4 IBC_i + \beta_5 FBM_i + \beta_6 BSK_i + \beta_7 CLG_i + \beta_8 FMA_i + \mu_i \quad (1)$$

	BMR	DSH	BDM	IBC	FBM	BSK	CLG	FMA	TQR
Mean	0.173913	0.159135	9.811594	3.811594	5.289855	9.739130	0.554220	36.55072	0.699387
Med.	0.000000	0.061600	9.000000	4.000000	5.000000	9.000000	0.520500	32.00000	0.700100
Max.	1.000000	0.893500	18.00000	6.000000	12.00000	18.00000	1.521300	117.0000	1.545600
Min.	0.000000	0.000300	5.000000	1.000000	2.000000	5.000000	0.063400	5.000000	0.243500
S. D.	0.381812	0.206456	2.936962	1.101808	1.863752	2.893462	0.275184	23.00865	0.227131
Skewness	1.720618	1.457124	0.930323	-0.353064	1.384200	1.003356	0.497798	1.107770	0.561644
Kurtosis	3.960526	4.422937	3.322628	2.990061	4.982928	3.558992	3.550318	4.588135	0.628025
Jarque-Bera	36.69856	30.23809	10.25251	1.433810	33.33862	12.47566	3.720427	21.36352	11.24769
Probability	0.000000	0.000000	0.005939	0.488261	0.000000	0.001954	0.155639	0.000023	0.003611
Sum	12.00000	10.98030	677.0000	263.0000	365.0000	672.0000	38.24120	2522.000	48.25770
Sum Sq. Dev.	9.913043	2.898444	586.5507	82.55072	236.2029	569.3043	5.149395	35999.07	3.508021

Table 1: Descriptive Statistics of Board of Directors and The Quotient Ratio

Source: Researcher's Framework.

Table 1 presents a summary of the descriptive statistics of the dependent variable and independent variables. Descriptive statistics is used to understand the nature of the variables. From the descriptive statistics, TQR has the respective values of 0.69 and 0.22 as its mean and standard deviation.

Findings / Results

Correlation Probability	BMR	DSH	BDM	IBC	FBM	BSK	CLG	FMA	TQR
BMR	001	0.03		-0.03	-0.01				
DSH		001		-0.19	0.03				
BDM	-0.05	-0.20	001	(0.34)*	(0.43)*				
IBC				001	(0.31)*				
FBM					001				
BSK	-0.04	-0.19	(0.98)*	(0.32)*	(0.34)*	001		-0.07	
CLG	0.03	-0.20	(0.36)*	0.17	0.17	(0.34)*	001	0.20	
FMA	-0.23	(-0.26)	0.00	0.08	0.12			001	
TQR	-0.09	(0.23)	0.22	0.08	0.12	0.22	(0.71)*	0.04	001

Table 2: Correlation Analysis

Source: Researcher's Framework.

Frequency of board meetings, independent board committees, board members relatives, directors' shareholdings and board measurement are the independent variables whose hypotheses were all rejected

because they did not correlate with TQR. * reveals the significance level at 0.01. Probabilities of the association between frequency of board meeting and independent board committees, frequency of board meeting and board skills, independent board committees and board measurement, independent board committees and board skills, board measurement and board skills, board measurement and company leverage, board skills and company leverage are all significant at 1% level. Company leverage also correlates with TQR at 1% significance level. This is highly significant.

F-statistic	0.214559	Prob. F(2,57)	0.8075
Obs*R-squared	0.515576	Prob. Chi-Square(2)	0.7728
F-statistic	1.223425	Prob. F(9,59)	0.3241
Obs*R-squared	10.66821	Prob. Chi-Square(9)	0.2927
Scaled explained SS	22.08441	Prob. Chi-Square(9)	0.0072

Table 3: Breusch-Godfrey Serial Correlation LM Test and Heteroskedasticity Test: Breusch-Pagan-Godfrey

Source: Researcher's Framework.

From the above table, it is insignificant because 0.29 is the probability of the observed R-square of Breusch-Pagan-Godfrey Heteroskedasticity Test. This means variance of residual is constant and indicates that residuals are having homoscedasticity. It means the model is appropriate. On the other hand, 0.77 is the probability of observed R square of Breusch-Godfrey Serial Correlation LM Test.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.286	0.084	3.416	0.001
BMR	-0.060	0.043	-1.407	0.165
DSH	0.382	0.084	4.528	(0.000)*
BDM	0.019	0.031	0.606	0.547
IBC	0.008	0.015	0.545	0.588
FBM	-0.008	0.010	-0.768	0.445
BSK	-0.013	0.030	-0.429	0.670
CLG	0.567	0.069	8.179	(0.000)*
FMA	-0.000	0.001	-0.352	0.726
R-squared	0.726		Mean dependent var	0.699
Adjusted R-squared	0.684		S.D. dependent var	0.227
S.E. of regression	0.128		Akaike info criterion	-1.145
Sum squared resid	0.962		Schwarz criterion	-0.821
Log likelihood	49.501		Hannan-Quinn criter.	-1.017
F-statistic	17.346		Durbin-Watson stat	1.824
Prob(F-statistic)	0.000			

Table 4: Individual Effect of Board of Directors on TQR

Source: Researcher's Framework.

Probability	Correlation	RESID
BMR		3.68E-16
P value		001
DSH		1.03E-15
P value		001
BDM		-6.12E-16
P value		001
IBC		2.68E-15
P value		001
FBM		1.07E-16
P value		001
BSK		5.54E-15
P value		001
CLG		7.45E-16
P value		001
FMA		-6.78E-16
P value		001

Table 5: Relationship between Residuals and Explanatory Variables

Covariance Analysis: Ordinary

Source: Researcher's Framework.

The probability of each independent variable is 001. They are perfectly insignificant. Therefore, residuals are not correlated with independent variables.

Discussions and Conclusions

From table 4 above, the probability of F-test statistics is 0.000. This is highly significant at 1% level. Therefore, explanatory variables jointly influence TQR. As the P-value is highly significant, a regression model is appropriate. The company's leverage is positively significant at 1% level. Hence, at 1% level company leverage is positively significant with TQR. This is highly significant. Ehikioya (2009) also carried out research with the use of a firm performance tool. Company leverage positively significant = Decrease in company leverage will lead to a decrease in TQR and vice versa. Individual beta value is 0.56 and company leverage has a significant positive effect on TQR. The company leverage has significant influence on TQR because the probability of company leverage is 0.000. At 1% level it is highly significant. At 1% level, company leverage is positively significant. The implication of this result is that small firms with low levels of debt ratio perform lesser than their counterparts i.e. the big companies with high debt ratio. The way forward for these smaller companies is to increase their debt ratio in order to increase their performance. It can be boldly stated here that debt is a very important tool for business growth and expansion. Here, TQR is the dependent variable. * shows the significance level at 0.01. Independent board committees, frequency of board meetings, board measurement, directors' shareholdings, and board members' relatives are insignificant. This means that independent board committees, frequency of board meetings, board measurement, directors' shareholdings, and board members' relatives don't have individual effects on the quotient ratio.

Since frequency of board meetings is insignificant, meaning that it does not have individual effects on the quotient ratio, it indicates the negative impact frequency of board meetings has on the quotient ratio. Agency and Resource dependence theories state that directors are to have unbiased meetings with a reasonable number of board meetings in order to avoid external dependence and information asymmetry. These points are in line with (Vafeas, 1999). Also the independent board committee does not have an individual effect on the quotient ratio. Though, the essence of setting up independent board committees is to encourage expertise and shared responsibility. But this act can also make the board of directors too occupied thereby reducing their full ability and activeness, which will in the long run reduce the performance of the organization. This result is supported by Chen and Wu (2016). They argued that board committees can cause information segregation and overloaded directors. Though an independent board committee is an essential variable in corporate governance, the board members should be given some space to carry out their assigned tasks in order to experience organizational performance, and not be overloaded with frequency of directors meetings and independent director committees meetings, if the organization really wants to boost their performance height.

Board measurement does not have an individual effect on the quotient ratio. Azeez (2015) found out that board measurement is having a negative significant effect with EPS at 5% level. Varying contextual factors pertaining to research settings might have given rise to these differences, such as cultural origin, political challenges, country's diversity, institutional problems, and states of economies. As a result Carver (2010) argues that there is no global applicability of corporate governance. In addition, Morck & Yeung (2009) supported this claim by mentioning that corporate governance differs primarily across nations. This is true because board measurement differs from firm to firm as well as from nation to nation. For instance; Dutch board measurements on average are two-thirds the size of U.S. board measurements (Ees et al., 2003). Note that the model is jointly significantly at 1% level (i.e. Prob. F statistics = 0.000), as such the independent board committees, frequency of board meetings, board measurement, board members' relatives and directors' shareholdings jointly have influences on the quotient ratio. The life span of the firm and board skills do not have an individual effect on TQR, which means life span of the firm and board skills are insignificant. The Durbin Watson test statistics is 1.82. Residuals are independent and the model is more appropriate because the model is jointly significant at 1% level. All the variables including the control variables which are: company leverage, life span of the firm, and board skills are having jointly influence on the quotient ratio.

Limitations and direction for future research

Similar research can be carried out using other variables. Also comparative research can be conducted.

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